

ABSTRACT

A process and a system are proposed for short-time arc welding, in particular for stud welding, with the step of sampling a welding parameter, in particular the arc voltage (U), during at least one time segment (T_s) of the welding operation, in order to detect disturbances, wherein the measurement curve determined from the sampling operation is smoothed and subsequently wherein at least one tolerance curve is generated which lies at a previously adjustable distance from the smoothed measurement curve, and subsequently the unsmoothed measurement curve is compared with the tolerance curve in order to detect high-frequency disturbances.